

REMARKS

Claim 24 is pending. By this preliminary amendment, Applicant has canceled claims 9-23 and 25-27. New claims 28-36 have been added. Support for these claims is found throughout the specification as discussed hereinafter. Entry and consideration of the amendments presented herein is respectfully requested. Accordingly, claims 24 and 28-36 are before the Examiner. Favorable consideration of these claims is respectfully requested. Withdrawal by the Examiner of double patenting rejections in response to Applicant's submission of a Terminal Disclaimer is acknowledged.

Rejection of claims 19-27 under 35 U.S.C. 112, first paragraph

Examiner rejected all pending claims under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention. All claims were further rejected as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. In the interest of expediting prosecution, Applicant has canceled claims 19-23 and 25-27, rendering the rejections of these claims under 35 U.S.C. 112 moot. Applicant believes that claim 24 was inadvertently rejected by the Patent Office. The claim uses a format closely similar to that of granted claims in U.S. Pat. No. 6,342,596 and corresponds to part (a) of granted claim 1. Hence, no other language than that present in the latter granted claim is present in claim 24. Withdrawal of the rejection of claim 24 under 35 U.S.C. 112, first paragraph, is respectfully requested.

New claims 28-36

In the preliminary remarks that accompanied the submission of subject continuation patent application, Applicant stated as reason for the submission his wish to better protect what he regarded as his invention by characterizing and claiming his molecular circuits using functional language.

The use of functional language is specifically authorized by the last paragraph of 35 U.S.C. 112: “An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material or acts described in the specification and equivalents thereof.”

New independent claims 28 and 30 closely follow the structure of previously granted claims, except for conservative substitutions of functional language at the exact points where this is necessary for fully claiming the invention disclosed in the specification, including equivalents obvious to one skilled in the art in view of the teaching provided in the subject patent application. Instead of enumerating promoters as structural elements that control the expression of the two genes of the circuit as provided in claim 1 of U.S. Pat. No. 6,342,596, claim 28 defines the same control function performed by promoters using functional language. Specifically, the term “and a first promoter activatable by stress and by the transcription factor, wherein the first promoter and the transcription factor gene are operably linked” of granted claim 1 is substituted by the term “the gene encoding the transcription factor being activatable by stress and by the transcription factor” in claim 28. Sufficient structural support for the claimed function is present in the specification of the subject continuation application as evidenced by allowed claim 1 of U.S. Pat. No. 6,342,596. Similarly, claim 30 combines the structural elements of claims 9 and 15 of U.S. Pat. No. 6,342,596 and uses essentially the same functional language to define promoter function as claim 28. Independent claim 35 describing a combination corresponding to the first two genes of claim 30 uses the same functional language as claim 30. Sufficient structural support for the functions described in claims 30 and 35 is present in the specification of the subject continuation application as evidenced by allowed claims 9 and 15 of U.S. Pat. No. 6,342,596. New claim 29 is the same as allowed claim 35 in U.S. Pat. No. 6,342,596, except that it depends from new claim 28, and new claim 31 is identical to granted claim 36, except that it depends from new claim 30.

The new expression vector claim 32 is analogous to and combines claims 7, 8, 12, 13, 14, 18-20, 24 and 25 of U.S. Pat. No. 6,342,596.

New claim 33 is analogous to allowed claim 26 of U.S. Pat. No. 6,342,596.

New claim 34 is analogous to allowed claim 30 of U.S. Pat. No. 6,342,596.

Support for the elements of new multiple dependent claim 36 can be found in the specification. For “mutated heat shock transcription factor” see p.12, lines 8, 14 and 16, and p.14, lines 14 and 17. For “chimeric transcription factor” see the definition on p.9, lines 3-6, and the examples on p.19, lines 15-20, p.20, lines 21-28 (The factors discussed are specifically called “chimeras” on line 27.), and p.21, lines 21-23. For “constitutively active transcription factor” see p.21, lines 17-18. For “a transcription factor active in the presence of a second stimulus other than a stress” see the example of p.22, lines 4-9 and line 20. For the characterization of the second stimulus as being different from a stress see the sentence bridging pp. 21 and 22.

In view of the foregoing remarks and amendments to the claims, Applicant believes that the claims currently before the Examiner are in condition for allowance, and notice of such action is respectfully requested. Examiner is cordially invited to call Applicant at 41-21-728-0320 if clarification is needed or if Examiner believes a telephone interview would expedite the prosecution of the subject application.

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Respectfully Submitted,



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